

REMARKS

I. STATUS OF THE CLAIMS

Claims 1-16 and 18-25 are pending. Claim 9 has been allowed. The Applicants sincerely thank the Examiner for the allowance of claim 9. Claims 1-8, 10-16, and 18-25 stand rejected. Claim 17 has been cancelled, and claim 1 is cancelled by this amendment, rendering its rejection moot. Claims 2, 4-7, 14-16, 23, and 25 are amended.

Claims 2 and 4-6 are amended to change dependency from canceled claim 1 to allowed claim 9. On page 3 of the final Office action, in reference to claims 16 and 23, the Examiner states that "it is requested that applicant makes the claims more specific as to fault isolation because although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims" (Office Action, Page 3, lines 8-10). Claims 14-16 and 23 are amended to make the claims more specific as to fault isolation, in accordance with the Examiner's request. Support for these amendments is found in at least paragraph [0055] of the written description. Claim 25, which depends from claim 23, is amended to conform to the language of claim 23. These amendments do not add new matter.

II. REJECTIONS UNDER 35 U.S.C. § 102

Claims 1-8, 10, 13-16, 18, and 20-25 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,024,327 by Dastidar et al. (hereinafter "Dastidar"). Claim 1 is cancelled, rendering its rejection moot.

Claim 10 recites, among other elements, "applying a first test vector at the input, the first test vector comprising a first series of first digital test values followed by a second series of second digital test values followed by a third series of the first digital test values". The Examiner rejects claim 1 under the same grounds as claim 1. However, in rejecting claim 1 the Examiner does not indicate where Dastidar discloses a first test vector comprising a first series of first digital test values followed by a second series of second digital test values followed by a third series of the first digital test values. Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the

claim." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984)(citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)). A *prima facie* case of anticipation of claim 10 has not been established.

A test vector in accordance with claim 10 is particularly desirable for detecting "stuck" type failures (see Written Description, paragraphs [0034]-[0036]). Dastidar must be taken as a whole, including where Dastidar diverges and teaches away from the claimed invention (*In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992)). Dastidar seeks to reduce test time, and discloses using a single test value of 1 providing a read value of 0 in a route using only one inversion (Col. 6, lines 1-20). Using a test vector having a first series of first digital test values followed by a second series of second digital test values followed by a third series of the first digital test values takes more test time than a single value. Dastidar diverges and teaches away from the claimed invention.

Dastidar would not have put one of ordinary skill in the art in the possession of claim 10. One following the disclosure of Dastidar would not have been led to apply a first test vector at the input, the first test vector comprising a first series of first digital test values followed by a second series of second digital test values followed by a third series of the first digital test values. Claim 10 and all claims that depend from claim 10 are patentable.

III. REJECTIONS UNDER 35 U.S.C. § 103

Claims 11, 12, and 19 stand rejected as being unpatentable over Dastidar.

Claim 11, which depends from claim 10, recites that "there are at least three first digital test values in the first series." Claim 12, which depends from claim 11, recites that "there are at least three second digital test values in the second series". The Examiner states that Dastidar "is already using functional digital test data vectors to test the device (column 6, lines 1-20). These functional test vectors include . . . expected results and test values ; hence it would be obvious to represent them with three different digital test values" (Office Action, Page 12, lines 3-6) The Applicants respectfully traverse.

Claim 11 recites a test vector having a first series of at least three first digital test values. In other words, the test vector includes at least a first 1-1-1 series or a 0-0-0 series.

The Examiner notes that it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum range or workable range involves only routine skill in the art. However, a particular parameter must first be recognized as a result - effective variable, *i.e.*, a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). Dastidar seeks to optimize (reduce) test time. One of ordinary skill in the art, in view of Dastidar, would have been likely to direct experimentation at reducing, not increasing test time. The Examiner has not indicated where the prior art discloses or suggests using at least three first digital test values in a first series of a test vector having a first series of first digital values followed by a second series of second digital test values followed by a third series of the first digital test values, or provided any convincing line of reasoning as to why such a modification of Dastidar would result in any recognized desirable result.

The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious (*In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992)). As argued above in support of claim 10, a series of at least three first digital test values in a test vector would not be likely to reduce test time. Dastidar does not recognize any result or suggest any motivation for having at least three first digital test values in a first series. *Prima facie* cases of obviousness have not been established for claims 11 or 12, which are further patentable.

IV. ENTRY OF THE AMENDMENT AFTER FINAL REJECTION

Applicants recognize that the Examiner has discretion in entering an amendment after final rejection, and believes that the present amendment is sufficiently focused to be appropriate for entry.

This amendment directly addresses the Examiner's concerns regarding certain aspects of the claim language raised on page 3 of the final Office action. Applicants

have made the claims more specific as to the fault isolation recited in the preambles of the as-filed claims in response to the Examiner's request on page 3 of the final Office action. These amendments are not believed to require additional search or raise new issues, particularly in view of allowed claim 9. While Applicants' amendments to the claims clarify and emphasize the novel aspects of the invention, the issues remain the same, and entry of this amendment under 37 C.F.R. § 1.116(b)(3) is respectfully requested.

The undersigned believes the amendment underscores the distinctions over the prior art. Thus, even if the Examiner is not persuaded to allow this application, entry of the amendment is respectfully requested because it places the claims in better form for consideration on appeal, in accordance with 37 C.F.R. § 1.116(b)(2).

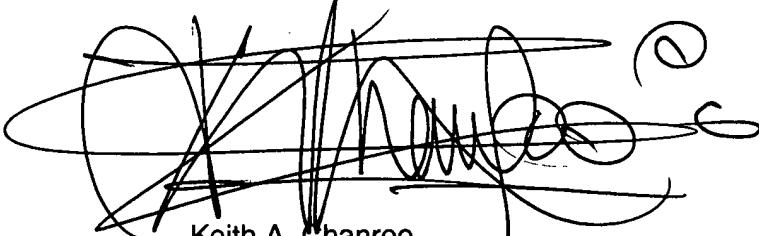
The previous amendment is believed to have been fully responsive to the previous rejection, and it is believed that the Examiner's final Office action set the stage for Applicants to respond directly to the Examiner's concerns. Entry is respectfully requested.

CONCLUSION

The Applicants submit that upon entry of this amendment all claims will be in condition for allowance. Favorable reconsideration of all rejected claims and timely issuance of a Notice of Allowance are respectfully requested. If the Examiner declines to enter this amendment in its entirety, the undersigned respectfully requests partial entry of this amendment, if possible. Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims, and/or drawings, then it is respectfully asked that such changes be made by an examiner's amendment, if the Examiner feels this would facilitate passage of the case to issuance.

If the Examiner believes a telephone conference would expedite prosecution of this application, the Examiner is cordially invited to telephone the undersigned at (408) 879-7710.

Respectfully Submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450, on November 15, 2006.

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